

IN THE CLAIMS

Please cancel claims 11 through 30, and, in their place, insert new claims 31 through 50.

~~31.~~ An item locator system having both voice activation and voice responsive capabilities for location feedback to locate one or more specific goods in a retail store, which comprises:

- ba
- a.) a support structure, for physically supporting said system at one or more locations, and functionally containing or connected to the following components:
  - b.) a continuous speech recognition digital signal processor (DSP), said continuous speech recognition engine utilizes tokens of raw acoustic signals representing utterances or words and matches these against a set of models and then relies upon likelihood to select a most likely

model to decode signals for interpretation;

c.) a programmable microprocessor interfaced with said speech recognition DSP;

d.) sufficient programming and circuitry contained within said programmable microprocessor to provide for voice activation and voice recognition and response to provide item location to a user wherein item and location data are defined by manager input to said system;

bx

e.) voice input means connected to said speech recognition DSP;

f.) memory storage means connected to said programmable microprocessor for storage of operational inputs, control inputs, voice recognition vocabulary for storage of command match and execute functions;

g.) at least one user feedback unit and connection

from said programmable microprocessor to said at least one user feedback unit, said at least one user feedback unit adapted to provide feedback selected from the group consisting of audio feedback, visual feedback and combinations thereof, to a user in response to an item location query.

2 1  
~~32~~. The system of claim ~~31~~ wherein said user feedback unit includes visual display means for viewing visual feedback in the form of text, or map or a combination thereof.

b2 3 1  
~~33~~. The system of claim ~~31~~ wherein said user feedback unit includes sufficient hardware and software to provide audio feedback to a user in response to recognizable voice input.

4 1  
~~34~~. The system of claim ~~31~~ wherein said memory storage means further includes flash ROM storage and provides for

remote diagnostics and system programming.

5  
35. The system of claim ~~31~~<sup>1</sup> wherein said voice input means includes a microphone.

6  
36. The system of claim ~~31~~<sup>1</sup> which further includes a secured manual control panel for input and management of item and location data into said system.

7  
37. The system of claim ~~36~~<sup>6</sup> wherein said manual control  
by panel further contains a keypad and menu for operation and programming options, a microphone, a screen for input and feedback display.

8  
38. The system of claim ~~31~~<sup>1</sup> which additional components further includes an audio feedback component which includes audio feedback hardware and software adapter to audibly

respond to recognizable voice input, including digital-to-analog conversion and an output speaker.

9  
39. The system of claim 31 wherein said DSP includes a continuous speech recognition engine having a continuous speech signal recognizer and a continuous speech signal interpreter.

10  
40. The system of claim 31 wherein said programming and circuitry within said programmable microprocessor includes embedded, voice driven interface for control of operational instructions, system locator function operations, and option and default functions.

11  
41. The system of claim 31 wherein said response to provide item location to a user includes aisle location.

12  
42. The system of claim ~~31~~<sup>1</sup> wherein said response to provide item location to a user includes shelf location.

B  
43. The system of claim ~~31~~<sup>1</sup> wherein said response to provide item location to a user includes aisle and shelf location.

14  
44. The system of claim ~~31~~<sup>1</sup> wherein said response to provide item location to a user includes bin number.

15  
45. The system of claim ~~31~~<sup>1</sup> wherein said response to provide item location to a user includes row and slot location.

b2  
14  
46. The system of claim ~~35~~<sup>5</sup> wherein said microphone is selected from the group consisting of a receiver handset, headset, and built-in microphone.

17  
47. The system of claim ~~31~~<sup>1</sup> wherein said support structure is a portable support structure.

18  
48.

1

The system of claim 31 wherein said speech recognition engine uses Hidden Markov Models for its continuous speech recognition engine.

19

6

49. The system of claim 36 wherein said speech recognition engine uses Hidden Markov Models for its continuous speech recognition engine.

br

20

8

50. The system of claim 38 wherein said speech recognition engine uses Hidden Markov Models for its continuous speech recognition engine.